access to a sheet at P of the same collection, I am informed that the handwriting and the quality of the paper of the label both indicate that the specimen is probably Delavay's.

Corollas in the UC specimen of *Kelloggia chinensis* have considerably shorter tubes and relatively broader lobes than in *K. galioides,* the ovaries are shorter, and the anthers are much smaller. Franchet makes a point of the consistently pentamerous flowers of *K. chinensis,* but pentamerous flowers are also common in *K. galioides,* and it may well be that more abundant material would also show tetramerous flowers in *K. chinensis.* Stipules of *K. galioides* are usually entire or bifid, whereas those of *K. chinensis* are larger and fimbriate. Pedicels in our material of *K. chinensis* are much shorter, and the inflorescence therefore less lax, than in *K. galioides,* and there is no swelling of the pedicels just below the ovary, as is invariably the case in *K. galioides.*—Lauramay T. Dempster, Jepson Herbarium, University of California, Berkeley 94720.

A flora of the Trinity Alps of northern California. By William J. Ferlatte. 206 pp., figs., map. University of California Press, Berkeley. 1974. $10.95.

Northern California has few published local floras, those for Mts. Shasta and Lassen being exceptions. In the east the Warner Mts. are the meeting grounds at both high and low altitudes of Great Basin and Californian floras, and in the west the flora of the Pacific Northwest meets, dissolves into, or changes in contact with the Mediterranean-climate flora of California proper. In between all three floras mix. Whittaker has suggested (Madroño 16:5–23, 1961) that the Klamath Mts. area in general is a center of western diversity and persistence similar to the Cumberland Mts. of Kentucky in relation to the eastern hardwood forests.

Many exciting floristic finds have been made in this northwestern part of California recently. Ferlatte's book discusses the mountain flora above 1520 m (5000 ft) of a small but most interesting part, namely the high, eastern, mostly granitic part of the Trinity Alps. This is a glaciated mountain area with vegetation belts from alpine above some 2240 m (8000 ft) to 2743 m (9002 ft) on Thompson Pk., down through subalpine forest, red fir, and mixed conifer with montane chaparral as a probably non-zonal vegetation type.

In his area of less than ca 400 km^2 (170 mi^2) are 571 species, including 75 shortly discussed in an appendix, which is unfortunately so segregated. The book describes each taxon with indented and therefore short keys, morphological descriptions, vegetation zones in which the taxa are found, and localities with ecological notes, citations of specimens, and time of flowering. Illustrations include many fine plant drawings by Charles S. Papp that are lifelike and helpful plus eight pages of photographs, many of which are aerial views of the terrain. A few comments can be made. Recent "excursion floras" have incorporated innovations that have decreased their size and increased their usefulness. These improvements for field use deserve imitation. The book would have more room for a plant geographical analysis of the flora if species descriptions were shortened to the barest necessities, mainly for this purpose differentiating characteristics. The descriptions are well-written and perceptive, however, improving on Munz' or perhaps representing a smaller range of variation in specimens. A few synonyms might have been listed. Ecological descriptions could have been expanded since the author has had much experience in the area and access to herbarium collections.

Still, the format chosen is self-contained, and therefore the book is a fine guide to natural history for the many visitors who use the Salmon-Trinity Primitive Area. Reclassification to a Wilderness Area is pending, and the public land management agency involved, the U.S. Forest Service, has thus had presented to itself free an excellent basic inventory for a part of the area it must consider. Unfortunately, the

1972 proposal for reclassification suggested eliminating from wilderness status most of the presently reserved area of the Trinity Alps that Ferlatte studied. This is in spite of an annual almost 10 percent increase in recreational use over the last 5 years according to the Forest Service. The obvious answer to the current problem of too much use of wilderness, so much that use must be rationed, is to dedicate more lands to wilderness use from areas that are *de facto* wilderness. The Forest Service has allowed an ostensibly mining road into the heart of the area to persist, and entries under the 1872 Mining Law have been used to acquire title to public land. However, most commercial ore or placer deposits were mined out 30 years or more ago. Alternate sections in most of the proposed exclusion are owned by the Southern Pacific Railroad, and the Forest Service cannot acquire these lands without appropriations, which Congress and the executive branch have not made available. The obvious temporary solution is to classify as wilderness those sections (often in contiguous blocks of more than 5000 acres) that are federally owned and rely on local good sense plus zoning to see that privately owned lands are not "developed" in ways that destroy public values. One of these values is the flora that Ferlatte describes so well and handsomely.

This is an excellent, useful flora. We need more like it.—Jack Major, Department of Botany, University of California, Davis 95616.

Washington wildflowers. By Earl J. Larrison, Grace W. Patrick, William H. Baker, and James A. Yaick. 376 pp., 64 color plates, 114 figs., 4 maps. Seattle Audubon Society, Seattle. 1974. $6.45.

Intended as a layman's guide to common Washington wildflowers this book includes 63 families and 1134 species. It was sponsored by 70 individuals and 12 organizations. It is notably free of typographical errors and is sturdily bound and conveniently sized for field use. Superficially, the guide is impressive, but beyond the colors and neat print an unfortunate disappointment exists.

Plants in figures 16, 20, 24, 27, 28, 33, and 63 are grossly misidentified; plate 19, identified as *Draba,* is a *Stellaria.* Figures 38 and 67 are printed upside down. Many b/w photos are of marginal quality, and some of people and general scenes contribute little to the guide's purpose. The authors stress wildflowers, but some photos of weedy species, instead of native, were used for illustrations.

To exclude weedy, shrubby, and less common species, as was the intent, a work must confront problems of definition. This was not done and arbitrariness is obvious. For example, the shrub *Potentilla fruticosa* is listed, whereas herbaceous *Rubus pedatus* and *R. pubescens* are not; *Lepidium perfoliatum* and other non-native plants are given, but common naturalized plants, e.g., *Conium maculatum, Nymphaea odorata* are not. *Pedicularis rainierensis,* a Mt. Rainier endemic appears, but *Tauschia stricklandii,* also a Rainier endemic, does not. Many common plants are also omitted, e.g., *Aster chilensis, Senecio pauperculus. Calypso bulbosa* is not "endangered", as stated.

The discrimination against common naturalized or weedy species will stump some users of the book. At least 35 common genera are excluded. The publication would be strengthened by the addition of some of those genera. As is, the guide user should avoid botanizing roadsides or disturbed areas. In general, the treatment appears stronger for west of the Cascades and less comprehensive for northeast and central Washington.

Arrangement of families is phylogenetic; however, genera and species appear in the order they artificially key out. This arrangement of genera and species is inconvenient and makes it difficult to locate taxa except by index. The guide would be easier to use if taxa had been listed alphabetically. Keys are stressed by the authors